

Energy & Data Transmission Systems for Stockyards





Stockyard systems

Conductix-Wampfler stockyard systems keep the world's busiest stockyards moving.

Providing a buffer zone, storage and blending areas for minerals on their journey to the point of end use, stockyard machinery often works 24/7 in a harsh environment, combining dust and damp and in many cases a sea-side atmosphere, heat and humidity.

Our solutions combine all our years of experience into high quality, robust solutions for all the applications on these sites:

• Longitudinal and radial/circular stackers

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- Bridge and portal reclaimers
- Bucket wheel reclaimers
- Combined Stacker/Reclaimers
- Tripper conveyors
- Special bulk handling machinery

Conductix-Wampfler – The Global Leader in Energy and Data Transmission Systems

Who we are

Conductix-Wampfler are the world's leading supplier of energy, data and media transfer system for mobile applications. As part of our Focus Markets organisation, our Mining & Bulk Materials Handling team are dedicated to providing our customers with the solutions they need to make sure their equipment keeps running in this demanding, 24/7 environment.

With more than 80 years experience in this market, we speak the language of our customers and are committed to providing excellence in our products and services.

Our Products

Conductix-Wampfler have the largest portfolio of products available in the market, providing the widest range of solutions available.

Our reeling systems, festoon systems and energy guiding chains, handle cables and hoses safely and efficiently under the most demanding of conditions.

Our conductor rail systems and slip ring assemblies provide robust alternatives when the application demands something different. Our products are manufactured and tested to high standards, with our facilities certified under ISO9001:2008.

Conductix-Wampfler can provide systems engineered to meet the specifications of the customers equipment, all of which are designed and built to withstand the harsh operating conditions in mines, bulk storage facilities and bulk terminals.



Global Experience – Local Service

We are present in more than 80 countries in the world and with our global network of Centres of Excellence, Production Centres and Sales & Marketing Offices we can provide unrivalled worldwide coverage, supporting our customers with reliable products and customised solutions.

So if it's a cable reeling drum for a stacker in South America or a energy guiding chain for a bulk crane in China, Conductix-Wampfler have the solution for you.

Motor cable and hose reel Reel solutions for real situations

Power, control and fibre-optic cables and hoses for dust suppression water are vulnerable items in the stockyard environment. During long (gantry) travel of your equipment, our aim is to provide accurate and predictable behaviour of the reeling system, protecting your cable or hose and ensuring the high level of machine availability you demand.

A range of drive, spool and control options are available to suit the application, the environment and your preference, with reeling lengths of up to 2000m as standard (longer upon request), current/voltage ratings up to 500A/36kV and ingress protection up to IP67.

Special finishes for seaside or other particularly difficult atmospheres are available.

Target applications

Long travel for longitudinal stackers, bucket wheel, portal & barrel reclaimers, stacker/reclaimers of all types, tripper conveyors

Level Winding Reel on a Stack Rake, USA Travel Length: 1500 m



Monospiral Reel on a Stack Rake, USA Travel Length: 320 m



Level Winding Reel on a Portal Reclaimer, Australia Travel Length: 680 m



Characteristics

• Principle drive options

- MAG Drive

simple, robust and effective, the ideal solution for the slow, heavy duty applications found in todays stockyards. Plug and play system with minimal maintenance.

- SMART Drive

Variable Frequency Drive from Conductix-Wampfler, providing accuracy and flexibility.

• Spool options

- Mono-Spiral

Diameters up to 8m, for run lengths of up to, nominally 700m.

- 3-2-3

Used where installation envelope is restricted in size. For cable diameters up to 70mm and run lengths up to 250m (longer on request).

- Level Wind

Robust, heavy duty construction. Skeleton spool for effective cable double-layer cooling. For systems with cable length over nominally 650m, with a maximum of 2000m (higher on request). Ideally suited to large cable diameters.

• Fibre optic rotary joints

Up to 24 channels. Range of sizes available up to 120 turns.



Monospiral Reel on a Portal Stacker, Russia Travel Length: 480 m



3-2-3 winding Reel on a Stacker, Australia Travel Length: 360 m



Motor Driven Cable Reel on a Stacker/Reclaimer, Thailand, Travel Length: 380 m

I Beam festoon systems As tough as the situation demands

Configurable to most beam sizes and styles (parallel or taper flange) and available with a wide range of wheels roller types and diameters to suit any requirement, multiple tiers for large cable/ hose packages, rail/beam cleaners, stainless steel fasteners as standard, the Conductix-Wampfler I beam festoon is ideally suited to the slow, heavy duty applications in the stockyard.

Slewing stacker and reclaimer operations can be accommodated with externally mounted festoon systems, allowing easy monitoring/ maintenance of systems in harsh environments.

Target applications

Bucket wheel reclaimers, trailing longitudinal/slewing stackers, tripper conveyors, bulk handling cranes, reclaimer rakes, bucket wheel bridge reclaimers





Festoon System on a tripper conveyor Festoon System on a Portal Stacker, Australia Festoon System on a Circular Bridge Reclaimer, USA

Slip rings Turning and slewing the smart way

Allows infinite rotation in circular stacker/reclaimers. With current/voltage ratings of up to nominally 3000A and 6kV and fluidic joints with up to 110 ways, 400Bar.

Available with larger inner diameter to allow material or services through the centre of the unit.

Combined power, control and media (water, air, oil, vacuum, other) are available with ATEX and SIL 3 certification. FORJ for data transmission (Ethernet and Profibus)

Target applications

Circular stacker/reclaimers, slewing stackers, bucket wheel excavators



Slip Ring under construction 2200 mm Inner diameter, 4200 mm outer diameter Slip Ring Assembly on an Electric Rope Shovel, Chile

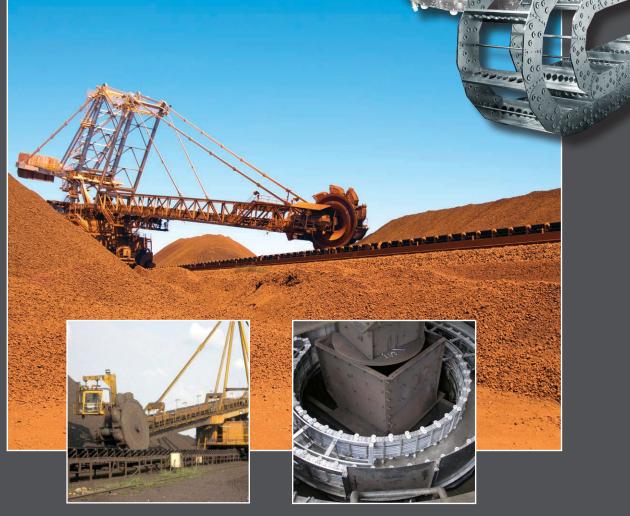
Energy guiding chains A chain of successes

Conductix-Wampfler energy guiding chains provide a robust solution for multiple cable and/or hose applications. Available in nylon, nylon with aluminium stays and steel, either galvanised or stainless 304, 316 or 316L. Our range of guiding channels and frames also in a choice of materials ensure accuracy of movement for reduced wear.

Our stainless steel chains are available with ATEX zone 2 certification Energy guiding chains provide a proven solution for linear operations and also slewing operations with a maximum rotational angle of 540 degrees.

Target applications

Stacker/reclaimers with trailing stackers, slewing/circular stackers, bucket wheel reclaimers, tripper conveyors



Energy Guiding Chains on boom stackers/reclaimers - slewing motion

Energy Guiding Chains on circular stacker/reclaimer - complete rotational movement

Conductor rails The simple solution

Ideally suited for grab cranes and tripper conveyors.

Available with a range of current/voltage ratings up to 1500A and 690V (higher on request)

Target applications

Grab cranes, tripper conveyors



Conductor Rails on a tripper conveyor

Buffers Safety at the end of the line

For final limit of travel. Available in rubber and cellular versions dependant on the duty.

Target applications

Stackers, reclaimers, stacker/reclaimers, tripper conveyors, grab cranes.



Cellular Buffer on a Stacker

Custom Services you can count on!

You can count on Conductix-Wampfler to meet your specific service needs and requirements.

With our expert teams everything is possible, from initial design and development to long term service contracts. The more complex your system, the greater your service life and operational reliability expectations are and the more sense it makes to take advantage of our after-sales service.

When it comes to service, you can count on Conductix-Wampfler to perform!



The Turnkey Solution

As a system supplier, Conductix-Wampfler offers you complete turnkey solutions. This includes the delivery of all necessary parts to complete your project.

We consider qualified consulting, project engineering of the complete system, the choice and selection of the right components, optimizing the accessories, the adequate logistic concept, and the commissioning on site to be important elements of Conductix-Wampfler's business activities.



Planning and Development

- Definition of the application parameters
- Selection of the proper components for the required system, optimized to your requirements, application parameters, and environmental factors
- Selection of the optimum energy supply solution in cooperation with you, our customer, as a function of all considerations including cost, service life, operating parameters, installation, and site requirements





Final Assembly

- Supervision of construction, assembly, and mounting on site, or
- Complete installation by our trained specialists

Service Agreement

- Regular maintenance and inspections to increase the operational life of your facility, ensuring long-term performance and availability
- All services required on site in the event of an incident, including spare parts and replacement materials
- Conductix-Wampfler service agreements: The "Worry-Free Package"

www.conductix.com

Conductix-Wampfler has just one critical mission: To provide you with energy and data transmission systems that will keep your operations up and running 24/7/365.

To contact your nearest sales office, please refer to: www.conductix.com/contact-search

